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## Value-Added Agriculture among Small Farmers in North Carolina: A Case Study

Jason Moffitt  
North Carolina A&T State University  
[jamoffit@aggies.ncat.edu](mailto:jamoffit@aggies.ncat.edu)

Bianca Jacques  
North Carolina A&T State University  
[bjjacques@aggies.ncat.edu](mailto:bjjacques@aggies.ncat.edu)

Anthony K. Yeboah  
North Carolina A&T State University  
[yeboaha@ncat.edu](mailto:yeboaha@ncat.edu)

John Paul Owens  
North Carolina A&T State University  
[owensj@ncat.edu](mailto:owensj@ncat.edu)

Jarvetta S. Bynum  
North Carolina A&T State University  
[jsbynum@ncat.edu](mailto:jsbynum@ncat.edu)

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# Value-Added Agriculture among Small Farmers in North Carolina: A Case Study

By:

**Moffitt, J., Jacques, B., Yeboah, A., Owens, J., Bynum, J.**

Department of Agribusiness, Applied Economics and Agriscience Education  
North Carolina A&T State University  
Greensboro, NC

## Abstract

This case study research was undertaken as an initial step towards studying the critical factors that influence the adoption of value-added as an additional enterprise by small farmers in North Carolina. Human factors such as age, years in farming, and level of education were perceived to be common elements. Production variables such as total acreage and value-added marketing were also deemed to be common features amongst the operators. The need to generate value-added funding, supply consumer demands, and expand core business operations were often mentioned among the goals of operators implementing value-added activities. Amongst the value-added operators, land availability, acquiring employee assistance, and weather calculations were cited as barriers or problems faced at their value-added operations. The biggest driving forces behind the operator's view of success was passion for their value-added growth and educational agritourism.

## Literature Review

The trend toward fewer, larger and increasingly corporate farms has formed a concern that many midsize family-owned farms will soon disappear. Degenerations in the number of farms and evidence of growing average acreage per farm have occurred many years in the United States. Already less than 2 percent of all farms account for nearly 40 percent of the value of U.S. output. Many rural areas faced with declining numbers of farm jobs consider the food processing sector as a source of potential income and employment growth. By adding value to farm products, this food processing sector is seen by some analysts as a key element for rural growth, as well to enhance farm income and provide rural jobs. Leaders of local communities are looking for solutions to their local economic problems. Value-added agriculture is an important strategy to both agricultural entrepreneurship and rural development (Coltrain, Barton and Boland, 2000; Kilkenny and Schluter, 2001; Womach, 2005). Value-added activities targeted to consumer desires have the potential to become more numerous in the future. These opportunities could help those involved in value-added activities to capture higher economic profits. Adding value to farm commodities may become an even more important income-enhancing strategy for producers. USDA (2007) reports that agricultural operations in the United States are becoming more diverse as farmers and ranchers look beyond commodity production to find new ways of generating income. Farmers are diversifying their operations to increase profitability by providing additional income from agritourism and recreational services, direct-to-consumer sales, and sales of value-added and specialty products, including certified organic products. The Bureau of Economic Analysis reports that in 2012 value added contributed more than \$201 Billion to the agricultural sector including \$167 Billion from farming (2014). Researchers agree that value-added agriculture is an important strategy to both agricultural entrepreneurship and rural development (Lu & Dudensing, 2015) (Coltrain, Barton and Boland, 2000; Kilkenny and Schluter, 2001). The current case studies build on the same initiative of alternative enterprises namely, biofuel production and agritourism, by focusing specifically on value-added agriculture among Small and Socially-Disadvantaged Farmers (SSDFs) in North Carolina as a strategy for enhancing the viability of the state's small farms.

## Methodology

Although this research project includes several surveys, for this component, case studies of value-added small farmers conducted in the summer of 2017 were the primary sources of data. The North Carolina Cooperative Extension Program identified three "value-added" farmers from its sampling frame to participate in the case studies.

Researchers identified sets of variables associated with value-added farm success through various literature, published and unpublished reports and recommendations from experts in the field. After the variables were operationalized, a questionnaire was developed as a guide for conducting the case studies interview protocols. Each case study consisted of a one visit protocol with electronic follow-up. Researchers conducted on-site interviews, and then toured the individual farms.

Guided by the questionnaire, farmers were encouraged to talk about their farming operations, motivation for farming, farm organization, marketing strategy and financial operations. During each case study, responses were recorded electronically and manually and then later transcribed.



## Case Study Matrix

Talking Points	Name of Farm		
	NW Farm	LN Farm	OR Farm
Factors that influence the addition of value-added operation	Revenue	n/a	Interest in agritourism/ag-education tours
Expectations and goals	Self farm	n/a	Value added for trees and scrubs
Barriers or problems	<ul style="list-style-type: none"> <li>Lack of knowledge on store vs farm product</li> <li>Old age/physical disabilities</li> <li>Labor issues</li> </ul>	Mother nature	<ul style="list-style-type: none"> <li>Revenue to keep up inventory for consumer demand</li> <li>Space for greenhouse</li> <li>Labor issues/funding</li> </ul>
Farm full-time	No	Yes	Yes
Years of farming	30 years	Entire life	Entire life
Acreage	3 acres	350 acres	150 acres
Training	Self-taught	n/a	n/a
Certifications	Dairy License	Food	Packaged meats
Software training	No	No	Yes
Services used at cooperative extension	n/a	Pesticide, food safety	Pesticide
Insurance	\$2 million aggregate	Yes	Yes
Employees	n/a	60 winter/ 140 off season/ 600 peak	5 Fulltime
How do you market your value-added	Farmers market; Internet; direct to stores	Farmers market; Internet; direct to stores	Internet; farm visit; on farm sales
Financial system	Manual accounting	Software used	Software used
Funding	Self-funded	Bank loans	Self-funded
Debt load	No debt	n/a	n/a
Income	<\$250,000 annually	>\$250,000 annually	<\$250,000 annually
Income from value added	n/a	5%-10%	50%
Gender	F/ 70 M	n/a	F/M
Race	Caucasian	Caucasian	Caucasian
Education	GED	College	College level
Value-added products	<ul style="list-style-type: none"> <li>Goat dairy products</li> <li>Cheeses and milk</li> <li>Agritourism</li> </ul>	<ul style="list-style-type: none"> <li>Pick your own</li> <li>Ice cream</li> <li>Jams</li> <li>Honey</li> </ul>	<ul style="list-style-type: none"> <li>Agritourism/Ag-Education tours</li> <li>Strawberries, peonies</li> <li>Woodings</li> <li>Garden center</li> <li>Packaged cattle meat</li> </ul>
Advice	<ul style="list-style-type: none"> <li>Make sure you have a market available or a demand for your product</li> <li>Invest in a niche market</li> </ul>	<ul style="list-style-type: none"> <li>Find something to complement your core business to mesh with labor</li> <li>Keep assets (employees) constructively employed</li> </ul>	n/a

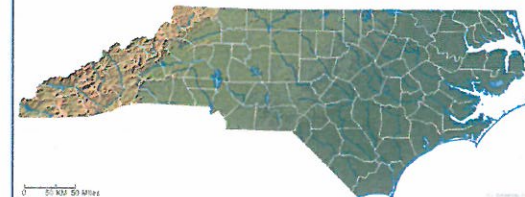


## Conclusions and Discussions

Based on literature review, the following variables should be viable predictors of success for value-added small farm operators: enterprise diversity, effective funding strategies, education (including workshops), concern for consumer demands, reliable employee assistance for the core business, suitable land availability, and concerns for the environment.

The case study farmers used a combination of marketing strategies including the Internet, farmers markets, contracts and direct sales to restaurants and grocery stores. These farmers also used a diverse mix of enterprises utilizing agricultural methods in education about farm raised livestock, store vs. farm products, and pick your own produce. Value-added influences can be economically viable, particularly for smaller producers, as well as, diversifying farming operations. One characteristic among the case study farmers was "no debt." Only one farmer did not use a computerized financial system, however all farmers were aware of their financial standings. None of the farmers mentioned any additional training at Cooperative Extension for value added products. One farmer participated in the educational seminars provided by the cooperative extension services and two farmers received pesticide training from the Cooperative Extension service. The educational level ranged from post high school to Bachelors.

The project developed a profile of North Carolina agricultural value-added industry, particularly those of small and socially-disadvantaged farmers. The project helped identify the types and characteristics of value-added activities performed in the state, and delineate the opportunities, challenges and threats to a successful value-added operation. Most importantly, the project will provide information to potential farmers, especially small and socially-disadvantaged farmers who intend to participate in value-added agriculture. Outreach program educational tools such as brochures and training manuals will be developed to assist extension agents to deliver training on value-added agriculture to small and socially-disadvantaged farmers. It is also anticipated that an additional outcome of this project will be a significant increase in the number of small and socially-disadvantaged farmers who apply for the USDA Value-Added Grant.



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